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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,521	12/07/2001	Douglas M. Dillon	PD-N970636A	1352
20991	7590	06/14/2005	EXAMINER	
THE DIRECTV GROUP INC PATENT DOCKET ADMINISTRATION RE/R11/A109 P O BOX 956 EL SEGUNDO, CA 90245-0956			TRAN, NGHI V	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/010,521	DILLON ET AL.
	Examiner Nghi V. Tran	Art Unit 2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 May 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 2-58 is/are pending in the application.
- 4a) Of the above claim(s) 2-16 and 40-46 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 17-39 and 47-58 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 2-58 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/07/01, 01/28/02, 08/14/02, 01/02/04</u> | 6) <input type="checkbox"/> Other: _____ |



DETAILED ACTION

Election/Restrictions

1. Claims 2-16 and 40-46 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 05/06/2005.

2. Applicant's election without traverse of Group II, claims 17-39 and 47-58, in the reply filed on May 06, 2005 is acknowledged.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Applicant is advised that should claims 19 and 49 be found allowable, claims 37 and 57 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after

allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 17-18, 21, 23, 25-28, 31, 33, 35-36, 47-48, 51, 53, and 55-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis et al., U.S. Patent No. 6,105,064 (hereinafter Davis).

7. With respect to claims 17, 25, 27, 35, 47, and 55, Davis teaches a gateway [col.7, Ins.57-63 and col.8, Ins.28-39] for use in a system wherein a source apparatus [32 i.e. sending endnode], said gateway, and a destination apparatus [34 i.e. receiving endnode] are coupled to a TCP/IP network, said gateway comprising:

- a packet receiving unit [42] that is configured to receive a packet addressed at the IP level from the destination apparatus to the source apparatus [fig.2 i.e. receiving endnode determine max window size and send the window size to sending endnode]; and

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- a transport level window size controlling unit that is configured to control the transport level window size of the packet received by said packet receiving unit in accordance with bandwidth usage associated with the destination apparatus [col.5, ln.40 - col.6,ln.63].

8. With respect to claims 18, 28, and 48, Davis further teaches the bandwidth usage is measured as an amount of data sent to the destination apparatus per unit of time [col.4, lns.13-58].

9. With respect to claims 21, 31, and 51, Davis further teaches the bandwidth usage is expressed as an average throughput [col.6, lns.46-54 i.e. the current send window decreased by a factor, such as one-half].

10. With respect to claims 26, 36, and 56, Davis further teaches said transport level window size controller controls the transport level window size of the packet in accordance with the source IP address of the packet by reducing the transport level window size in respond to bandwidth usage associated with the source IP address exceeding a threshold [see abstract and col.5, ln.40 - col.6, ln.63].

11. With respect to claims 23, 33, and 53, Davis teaches a gateway [col.7, lns.57-63 and col.8, lns.28-39] for use in a system wherein a source apparatus [32 i.e. sending

endnode], said gateway, and a destination apparatus [34 i.e. receiving endnode] are coupled to a TCP/IP network, said gateway comprising:

- a throughput controlling unit that is configured to control throughput of data sent from the source apparatus to the destination apparatus through the TCP/IP network in accordance with a number of TCP connections that are open [col.9, ln.5 - col.10, ln.35].

12. Claims 24, 34, 38-39, 54, and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Engel et al., U.S. Patent No. 6,519,636 (hereinafter Engel).

13. With respect to claims 24, 34, 38-39, 54, and 58, Engel teaches a gateway [170] for use in a system wherein a source apparatus [160S], said gateway, and a destination apparatus [160D] are coupled to a TCP/IP network, said gateway comprising:

- a throughput controlling unit that is configured to control throughput of data sent from the source apparatus to the destination apparatus through the TCP/IP network in accordance with a leaky bucket analysis of a user's throughput [col.9, lns.10-43].

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 19-20, 29-30 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis as applied to claims 17 above, and further in view of Parker et al., U.S. Patent No. 4,009,346 (hereinafter Parker).

16. With respect to claims 19-20, 29-30, and 49-50, Davis is silent on the unit of time is a 24 hour period.

In a communication system, Parker discloses the unit of time is a 24 hour period [col.114, ln.54 - col.115, ln.7].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Davis in view of Parker by specifying a 24 hour period of the unit of time because this feature avoids congestion and delay [Parker, col.114, lns.55-62]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Davis in view of Parker in order to round up to the nearest frame integer [Parker, col.114, ln.63].

17. Claims 22, 32, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis as applied to claims 17, 27, and 47 above, and further in view of Guha, U.S. Patent No. 5,699,369.

18. With respect to claims 22, 32, and 52, David is silent on the bandwidth usage is determined using a leaky bucket analysis.

In a communication system, Guha discloses the bandwidth usage is determined using a leaky bucket analysis [col.13, Ins.6-16].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Davis in view of Guha by using a leaky bucket analysis because this feature avoids congestion [Guha, col.13, ln.6]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Davis in view of Guha in order to allow sources to shape the traffic [Guha, col.13, Ins.13-14].

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. "Method and apparatus for adjustment of TCP sliding window with information about network conditions," by Ruutu et al., U.S. Patent No. 6,219,713.
 - b. "Method for adaptive control of windows and rates in networks," by Mitra et al., U.S. Patent No. 5,426,635.
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Patent Examiner
Art Unit 2151

NT



ZARNI MAUNG
SUPERVISORY PATENT EXAMINER